

### REMARKS

Claims 1-27, 40, 41, 58-60, 69-71, 78-88, 90-95, 98, and 109-115 are allowed in this application. Claims 116-128 are rejected, as before, on the grounds that certain omitted limitations constitute added new matter. The rejections are traversed.

First, applicants address certain formal matters. Particularly, claim 1 is amended to correct the numbering whereby (i) becomes (e) and (ii) becomes (f).

The omission in claims 116-121 of any reference to an acid catalyst, and the omission in claims 118-121 of a reference to a surfactant or a particular surfactant is not new matter. This is because catalysts and surfactants are known in the prior art and because the Jepson-formatted claims recite as inventive steps only that which is new, not that which is admittedly old. The Examiner does not respond to this argument previously made, but simply states that an acid catalyst and either an ammonium cationic or alkyl triethylammonium chloride or bromide surfactant is "a critical component" of applicants' claimed method, without citing where in the specification applicants referred to any of these components as being critical to their invention.

In blunt fact, applicants' specification says the opposite: the specification says that these are *not* critical components. As was pointed out before, base catalysts were well known in the type of chemistry recited in the claims' preambles prior to applicants' filing of the original Bruinsma patent application, and are cited in the background of the invention and the cited reference to Kresge, et al. Similarly, anionic and other neutral surfactants also were well known and are cited in the background of the invention and the cited references to Brinker and Tanev. The case law cited by applicants in their amendment of December 10, 2001 compellingly illustrates that a precise definition of materials is not needed when the essence of the invention does not reside in the use of such materials in the claimed process. See *Ex parte McAllister et al.*; *Ex parte Calingaert et al.*, *Johnson Worldwide Associates Inc.*, *Ex parte Parks*, *In re Peters and Anderson* and *In re Rasmussen*. The Examiner does not explain how these cases are different from the present case and thus are not controlling law undermining the Examiner's position.

Claim 128 is amended hereby to overcome certain indefiniteness rejections. Specifically, the heating is clarified, consistent with the patent specification at columns 8-14 (film examples 1-5) and the Examiner's suggestion, to recite a specific temperature range effective to decompose and calcine the film. Also, amended claim 128 now recites the

solution contains a catalyst, a silica precursor, and a solvent in addition to the surfactant. It is submitted that the claim recites all necessary chemical components in reasonably broad terms commensurate with the scope of their disclosure in view of what was known by those of skill in the background art including the well known use of base and other catalysts, silica and other precursors, aqueous and other solvents and ammonium, chloride, bromide or other surfactants.

It is improper to restrict applicants' claims to recite every detailed limitation found in the Detailed Description of the Invention, as though only a single preferred embodiment or only a single best mode of practicing the invention is patentable, contrary to case law and contrary to the broader suggestions found within the Abstract, Background and Summary of the Invention.

The Examiner acknowledges that applicants are entitled to a broadened reissue patent, but then he proceeds improperly to import limitation after limitation into applicants broadened reissue claims *from those original claims that, it is conceded, were mistakenly presented as too narrow in scope.*

### CONCLUSION

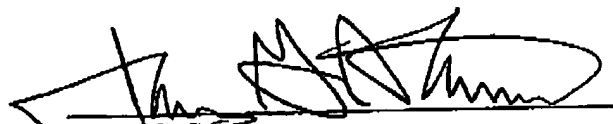
For the foregoing reasons, reconsideration and allowance of all pending claims of the application is solicited. Please contact the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case to a fair and final resolution.

**20575**

PATENT TRADEMARK OFFICE

Respectfully submitted,

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# VERSION WITH MARKINGS TO SHOW CHANGES MADE

## In the Claims

1. (Amended) A method of making mesoporous silica materials, comprising the steps of

(a) combining a silica precursor with an aqueous solvent, an acid and a surfactant having an ammonium cation into a silica precursor solution,

(b) templating the silica precursor with the surfactant and obtaining the mesoporous material from the templated silica precursor,

(c) forming said silica precursor solution into a preform; and

(d) rapidly evaporating said aqueous solvent from said preform for

obtaining the mesoporous material, wherein the improvement comprises:

[(i)] (e) providing said aqueous solvent in an amount resulting in complete hydrolysis and providing said acid in an amount maintaining a hydrolyzed precursor and avoiding gelation or precipitation; and

[(ii)] (f) providing said surfactant and said silica precursor in a mole ratio that is above a lower mole ratio that produces a non-porous silica phase and below an upper mole ratio that produces a lamellar phase.

128. (Amended) A calcined mesoporous silica film on a substrate formed by a process comprising: *guide* *ok*

dispensing a catalyst- and silica precursor- and solvent- and surfactant-containing [precursor] solution on the substrate;

forming a film on the substrate by rapid evaporation of the [precursor] solution on the substrate; and

heating the film on the substrate to a temperature of between about 105 degrees C and about 600 degrees C [sufficient] to decompose the surfactant and calcine the mesoporous silica film.

*new matter again!!*  
*new matter also indefinite*  
*which one is the heating step & which one is long??*